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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/576,800	05/23/00	CANNELL	D 05725.0572

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EXAMINER	
FLOOD, M	
ART UNIT	**PAPER NUMBER**
1651	10

DATE MAILED: 03/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/576,800	CANNELL et al.
Examiner	**Group Art Unit**
Michele Flood	1651

☒ Responsive to communication(s) filed on *Mar 8, 2001*.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-38* is/are pending in the application.

Of the above, claim(s) *14-38* is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-13* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *3 and 7*

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Election/Restriction

Applicant's election with traverse of Group I, Claims 1-13, in Paper No. 9 is acknowledged. The traversal is on the grounds that the Office has not provided adequate reasons or examples to support the conclusion of patentable distinctness or shown that a serious burden exists in searching the entire application. This is not found persuasive because the invention of Group I, Claims 1-13, is drawn to a method of protecting keratinous fiber from extrinsic damage comprising at least plant extract chosen from potato extract, mistletoe extract, avocado extract, wheat germ extract, and willowherb extract; the invention of Group II, Claims 14-27, is drawn to a method of improving combability and/or curl formation of keratinous fiber comprising applying to said keratinous fiber a composition comprising at least one plant extract; and, the invention of Group III, Claims 28-38, is drawn to a composition for the treatment or protection of keratinous fiber, said composition comprising at least one willowherb extract and at least one sugar. The different groups are directed to three patentably and separate inventions, independent and distinct from the other. Moreover, the ingredients disclosed in the method claims have more than one use, as evidenced by the claims themselves. Thus, the search and burden are substantial and not limited or encompassed by the search for the composition.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 14-38 drawn to an invention nonelected with traverse in Paper No. 9. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruiseco (B) or Wolf et al. (F) or Konishi et al. (O).

Applicant claims a method of protecting keratinous tissue from extrinsic damage comprising applying to the keratinous fiber a composition comprising at least one plant extract is chosen from potato extract, mistletoe extract, avocado extract, wheat germ extract, willowherb extract, and kidney bean extract. Applicant further claims a method, wherein the composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream, and wherein the at least plant extract is present in the composition at a concentration ranging from 0.01% to 5.0% relative to the total weight of the composition.

Ruiseco teaches a method of treating dry scalp and skin conditions by placing a composition comprising avocado extracts and arnica. In Column 2, lines 10-17, Ruiseco teaches that the plant extract composition is effective in treating dry skin conditions which result from

treatment of angina, chemotherapy and radiation. Ruiseco further teaches methods for the use of his composition for the treatment of hair loss. In Column 2, lines 50-67, Ruiseco teaches that the amount of avocado is 400 g of avocado and 500 go of arnica is used in the making of the referenced composition. See Claims 3 and 4.

Wolf teaches a method of moisturizing and forming a film on skin comprising applying to the skin cosmetic and pharmaceutical compositions comprising kidney bean extract *(Phaesolus vulgaris*) extensin which exert beneficial effects on skin, hair, and nails. The kidney bean extensin taught by Wolf can be incorporated into the making of hair shampoos or conditioners, facial and eye makeup, moisturizing creams, and nail enamels, in dose amounts of 0.001-30% of the total weight of the composition.

Konishi also teaches a method of protecting the hair by applying to the hair and skin an herbal hair tonic comprising an extract of mistletoe and an extract of *Angelic pubescens* Maxim., in a amount of 0.1 to 5% of the total died material in the hair tonic composition. Konishi teaches that the hair tonic promotes hair growth without skin irritation. Konishi further teaches that the mistletoe alone has remarkable trichogenous effect.

The references of Ruiseco, Wolf, and Konishi anticipate the claimed subject matter.

Claims 1-3, 7 and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Bradbury et al. (E).

Applicant claims a method of protecting keratinous fiber from extrinsic damage comprising applying to the keratinous fiber a composition comprising sucrose and willowherb extract.

Bradbury teaches a method of topically applying to hair a composition comprising sucrose and willowherb (*Epilobium*). The method taught by Bradbury is used for regulating the growth and loss of hair. The reference anticipates the claimed subject matter.

Claims 1, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Lupulet et al. (N).

Applicant claims a method of protecting keratinous tissue from extrinsic damage comprising applying to the keratinous fiber a composition comprising at least one plant extract is chosen from potato extract, mistletoe extract, avocado extract, wheat germ extract, willowherb extract, and kidney bean extract. Applicant further claims a method, wherein the composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream, and wherein the at least plant extract is present in the composition at a concentration ranging from 0.01% to 5.0% relative to the total weight of the composition.

Lupulet teaches a method of protecting keratinous tissue by apply a massage cream to the skin, which promotes penetration of active ingredients and prevents skin damage. The massage cream comprises 0.5-3% wheat germ extract and 0.01-2% *Oenothea biennis* (evening primrose oil-a willowherb extract).

Claims 1-6 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bathhurst et al. (A).

Applicant claims a method of protecting keratinous tissue from extrinsic damage comprising applying to the keratinous fiber a composition comprising at least one plant extract is chosen from potato extract, mistletoe extract, avocado extract, wheat germ extract, willowherb extract, and kidney bean extract. Applicant further claims a method , wherein the composition further comprises at least sugar, wherein the sugar is chosen from monosaccharides, disaccharides and polysaccharides, wherein the monosaccharides are chosen from pentoses and hexoses, wherein the pentoses are chosen from ribose, arabinose, xylose, lyxose, ribulose, and xylulose, and wherein the hexoses are chosen from allose, altrose, glucose, mannose, gulose, idose, galactose, talose, sorbose, psicose, fructose, and tagatose. Applicant further claims a method, wherein the composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream. Applicant further claims a method, wherein the keratinous tissues is chosen from skin, hair, eyelashes, eyebrows, and nails. Applicant further claims a method, wherein the at least one plant extract is present in the composition at a concentration ranging from 0.1% to 5.0% relative to the total weight of the composition, and the at least one sugar is present in the composition at a concentration ranging from 0.001% to 3.0% relative to the total weight of the composition.

Bathhurst teaches a method of applying to an area of baldness compositions termed phytogenic apoptosis inhibitors (PAIs), which are administered in effective dose amounts to

inhibit apoptosis. PAIs can be isolated from a variety of different plants and plant organs. Preferably the plants are in the Leguminosae (beans and peas etc.) family, but PAIs can be isolated from other plants such as those in the Solanum (such as potatoes) and allium (such as garlic) families. PAIs can also be isolated from partially purified plant extracts including, but not limited to, molasses, lecithin, partially purified protein concentrates and partially purified protein hydrolysates. See Column 3. lines 27-38. In Column 6, lines 1-17, Bathhurst teaches an anti-apoptotic L/G fraction, wherein the carbohydrate content consists of arabinose and galactose in a 3:2 ratio with fucose, rhamnose, glucosamine, glucose and mannose. See TABLE 1 and TABLE 4. Effective therapeutic dose amounts of the PAIs taught by Bathurst are in the range from about 0.5%-100% of at least one PAI. In column 9, lines 52-60, Bathurst teaches topical each of the instantly claimed pharmaceutical forms for the topical administration of PAIs. In Column 11, lines 20-31, Bathurst teaches that are administered for the treatment of dermatologic conditions or skin diseases. In Column 12, lines 33-57, Bathurst teaches that PAIs can be used to treat various apoptosis-related conditions, including baldness caused by apoptosis of the hair follicles. Thus, the PAIs taught by Bathurst can used in topical treatment of the skin to prevent continued hair loss for the restoration of normal skin function. See Claims 1, 6, and 8. The reference anticipates the claimed subject matter.

Claims 1-4, 6-7 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Carson et al. (C).

The claimed invention of Claims 1-6 and 10-13 was presented above. Applicant further claims a method of protecting keratinous fiber from extrinsic damage, wherein the disaccharides are chosen from maltose, sucrose, cellobiose, trehalose and lactose.

Carson teaches a method of delivering a compositions for topical application to mammalian skin, hair or nails containing sugars and at least one plant extract. See Claims 1-4, 7, and 17-18. The compositions taught by Carson are oil-in-water emulsions containing an amphipathic compound which carries at the head end of its hydrophilic part a moiety recognized by adhesions of microorganism or on a biological surface. See Column 3, lines 8-44. In Column 4, lines 24-50, Carson teaches examples of amphipathic compounds comprising a biospecific sugar moiety, wherein the sugar moiety is either a monosaccharide, disaccharide or a polysaccharide. In Column 4, lines 52-68 bridging Column 5, lines 1-15, Carson teaches preferred amphipathic compounds incorporating β–D-galactose are aldobionamides, including lactobionamide and maltobionamide. The amphipathic compounds taught by Carson constitute from about 0.05% to about 10% by weight of the emulsion, and preferably 0.1% to 10% by weight of the emulsion. See Column 7, lines 39-46. In Column 7, lines 52 to Column 8, line 3, Carson teaches that the composition contains oil droplets which serve as a substrate for an amphipathic compound, and that the association of the oil droplet and amphipathic compound provides a multiple binding site for a microorganism or a biological surface. Suitable oils or

lipophilic compounds taught by Carson include evening primrose (willow herb extract) and avocado oil. In Column 9, lines 36-54, Carson teaches that the amount of the lipophilic compound in the composition ranges from 0.01% to 10% by weight, preferably from about 0.1% to 3%. Carson further teaches that lipophilic compounds which serve more than one function, for example plant extracts with antimicrobial activity, can comprise 0.05% or 0.1% to 3.0% of the total composition. Lastly, Carson teaches that lipophilic materials may include skin anti-ageing compounds, skin conditioning compounds, vitamins, antimicrobials, and UV-absorbing materials, in Column 8, lines 54-59. The reference anticipates the claimed subject matter.

Claims 1-3 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Tolpa et al. (D).

The claimed invention of Claims 1-3 and 10-13 was presented above.

Tolpa teaches a method of administering a composition comprising a peat-derived bioactive product and herb extract in the form of either a gel or an ointment. The composition contains the peat-derived product in an amount of 0.1-10% by weight, preferably 0.05-1.00%, and most preferably 0.05-0.10% by weight, wherein the peat-derived product primarily contains polysaccharides, and other mineral and organic compounds which have nourishing and stimulating effects on humans and mammals. See Column 3, line 18 to Column 4, line 10 and Column 14, lines 24-28. In Column 11, lines 9-40, Tolpa teaches that the use of a hair balm comprising peat-derived produce in an amount of 0.01%-1% by weight and herb extracts in an amount of 0.01-10% by weight, prevents excessive drying of the hair and skin. Tolpa further teaches that suitable

herb extracts like camomile extract or wheat germ extract can be used in the making his compositions. The reference anticipates the claimed subject matter.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (C) or Tolpa et al. (D), in view of Ruiseco (B), and further in view of Konishi et al. (O).

The claimed invention was presented above.

The teachings of Carson and Tolpa are set forth above. Neither Carson nor Tolpa teach a method of protecting keratinous fiber from extrinsic damage comprising applying to the keratinous fiber a composition comprising mistletoe extract or avocado extract. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods taught by either Carson or Tolpa to provide a method of protecting keratinous fiber from extrinsic damage by replacing the referenced plant extracts taught by Carson and Tolpa with either avocado extract or mistletoe extract because Ruiseco teaches that the application of avocado extract is effective in the treatment of hair loss and dry skin conditions due to the use of heart medication, and exposure to chemotherapy and radiation, and Konishi teaches

a mistletoe containing hair formulation with trichogenous effect which promotes hair growth without skin irritation. One of ordinary skill in the art at the time the invention was made would have been motivated and one would have had a reasonable expectation of success that the substitution of one plant extract for the other would provide the claimed method because both Ruiseco and Konishi teach the beneficial effects of incorporating extracts of avocado and mistletoe in compositions used in methods for the protection of keratinous fiber from extrinsic damage and Tolpa expressly teaches that herb extracts synergistically improve the therapeutic effect of his compositions when used in methods for the treatment of certain diseases.

Accordingly, the claimed invention was prima facie obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claims 1-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No.

09/527,599. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are drawn to the use of identical or at least very similar ingredients to effect the same result or essentially the same result. Thus, the claims are obvious variants of each other

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michele Flood whose telephone number is (703) 308-9432. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is (703) 308-0196 or the Supervisory Patent Examiner, Michael Wityshyn whose telephone number is (703) 308-4743.

MCF

March 21, 2001

CHRISTOPHER R. TATE
PRIMARY EXAMINER